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JOURNAL OF
BUSINESS AND MANAGEMENT
Vol. 4, No.9, 2015: 1044-1052

OPTIMAL CAPITAL STRUCTURE AND FINANCIAL PERFORMANCE ANALYSIS FOR PT. MATAHARI DEPARTMENT STORE TBK.

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Abstract. PT. Matahari Department Store Tbk has been doing an aggressive expansion by keeps expanding its network and opening up new stores. From this year onward the company has determined 74 possible locations for new stores. To support expansion plan above, the company needs to achieve better financial performance as share price of company is influenced by the company's performance. To maximize share price and company's value, the management will need to increase the performance and fix aspect that is still lacking. Other than that to do the expansion efficiently, optimal capital structure will be needed. To analyze the company financial performance, the author uses time series and cross sectional analysis, while to find the optimal capital structure the author will use WACC method. The analysis indicates that the current capital structure of PT. Matahari Department Store Tbk consists of 80% debt and 20% equity. The optimal capital structure for PT. Matahari Department Store Tbk is in 68% of debt level. For financial performances, there are some aspects that already ideal and some are not yet ideal.

Introduction

PT. Matahari Department Store Tbk is one of the biggest retailer of attire, cosmetic, accessories, and homeware which is supplied by local and international high quality suppliers. Today, Matahari has own more than a hundred department stores which are located in 65 cities in Indonesia which makes it the leading company in fashion retail business. PT. Matahari Department Store Tbk has been doing an aggressive expansion where the company spends most of its capital expenditure for new store opening and store maintenance. Matahari keeps expanding its network by opening up new stores every year and from this year onward the company has determined 74 possible locations for new stores. The company has also notice a big opportunity of target market outside Java region. The company believes that department store market outside Java is still underserved compared to the increase of middle income segment, so there are still a big extent for continued expansion. Other than number of shopping malls is expected to increase as incomes rise and infrastructure improves.

To support expansion plan above, the company needs to achieve better financial performance. Financial performance will also give a clear image of how healthy the company is. Share price of company is also influenced by the company's performance. To maximize share price and company's value, the management will need to increase the performance and fix aspect that is still lacking. Other than that the company also needs to have the capital needed for the expansion investment and have the capital structure that support the aggressive expansion. If the company wants to do the expansion efficiently, the company needs the capital structure to be on its optimal level. An optimal capital structure will result in the lowest cost of capital for the company which will give tremendous advantage for the

company. If PT. Matahari Department Store Tbk management objective is to maximize shareholder's wealth, then financial decision made should enhance the company value. By setting the company capital structure to the optimum point, the company value will be maximized since the cost of capital will be in the most optimum point.

This research is aiming to find out which aspect of the financial performance needs to be fixed to support the company expansion and to find out the optimal capital structure suitable for PT. Matahari Department Store Tbk and this research address the questions:
1. What is the current capital structure of PT. Matahari Department Store Tbk?
2. What is the optimal capital structure for PT. Matahari Department Store Tbk?
3. How is the financial performance of PT. Matahari Department Store Tbk from 2010 - 2014?
4. What is the recommended action for PT. Matahari Department Store Tbk future improvement?
In this research the author will only do financial performance analysis of PT. Matahari Department Store Tbk for the last 5 years (2010 – 2014). The author will use time series analysis and cross sectional analysis with 3 national competitors and 3 international competitors for benchmark. For optimal capital structure, the author will only use WACC method. Data used in this research is financial report of PT. Matahari Department Store Tbk from 2010 – 2014 and annual report 2014.

Literature Review

In this research, the author uses some literature review that based on books, journals, papers, and Internet such as "Corporate Finance" by Ross, "Investment Valuation" by Aswath Damodaran and "Principle of Managerial Finance" by Gittman. The author uses ratio analysis with 2 method; time series and cross sectional to analyze financial performance and uses WACC method to determine capital structure. Ratio analysis involves methods of calculating and interpreting financial ratios to analyze and monitor company's performance. The basic inputs to ratio analysis are the company's income statement and balance sheet. Basis for comparison is needed to understand the company's situation. Basically there are two types of ratio comparison which is cross sectional analysis and time series analysis. Financial ratios are mostly divided into five categories which are liquidity, activity, debt, profitability and market ratio. Liquidity, activity, and debt ratios primarily measure risk. Profitability ratios measure return.

Table 1 Financial Performance Ratios

Ratios	Formula
Liquidity Ratio	
Current Ratio	Current Asset : Current Liabilities
Quick Ratio	(Current Asset-Inventory): Current Liabilities
Activity Ratio	
Inventory Turnover	Cost of Goods Sold : Inventory
Average Collection Period	Account Receivable : Average Sales per day
Total Asset Turnover	Sales : Total Assets
Debt Analysis	
Debt Ratio	Total Liabilities : Total Assets
Times Interest Earned Ratio	EBIT : Tax
Debt to Equity Ratio	Total Liabilities : Total Equity
Profitability Ratio	

Gross Profit Margin	Gross Profit : Sales
Operating Profit Margin	Operating Profit : Sales
Net Profit Margin	Earnings Available for common stockholder : Sales
EPS	Earnings Available for common stockholder : Number of Shares
ROA	Earnings Available for common stockholder : Total Asset
ROE	Earnings Available for common stockholder : Common Stock Equity

Weighted average cost of capital is the expected average future cost of capital over the long run. Weighted average cost of capital is obtained by weighting the cost of each specific type of capital by its proportion in the capital structure. WACC show the overall cost of capital that the company has to pay for those various components in the company's capital structure.

$$WACC = Cost\ of\ equity\ \left(\frac{Equity}{Debt+Equity}\right) + Cost\ of\ debt\ \left(\frac{Debt}{Debt+Equity}\right) \quad \text{(Equation 1)}$$

Cost of equity is divided into two which is cost of preferred stock and cost of common stock. Cost of preferred stock is the ratio of preferred stock dividend to the net proceeds from the sale of the preferred stock itself, while cost of common stock is the return required on the stock by investors in the marketplace. To estimate cost of equity, the author uses CAPM method. Capital asset pricing model is a formula which implies that the expected return on a security is linearly related to its beta. . In this method, risk is recognized as systematic risk and this risk is estimated using beta.

$$Rs = Rf + \beta\ x\ (Rm - Rf) \quad \text{(Equation 2)}$$

Beta value of a company will show how the company return lie towards the market return. To adjust leverage level of a company, calculation of beta unlevered is required. Beta unlevered is beta of company if the company has no debt. Difference between levered beta and unlevered beta is the risk of using debt in the company capital structure.

$$\beta e = \beta u\ [1 + (1 - t)\frac{D}{E}] \quad \text{(Equation 3)}$$

In this research the cost of debt is generated from the risk free rate plus Damocaran country interest spread. The spread is determined by interest coverage ratio of the company. And the cost of debt of the company must be after tax cost of debt.

$$Interest\ Coverage\ Ratio = \frac{EBIT}{Interest\ Expense} \quad \text{(Equation 4)}$$

$$rd = Loan\ interest\ rate\ x\ (1 - tax) \quad \text{(Equation 5)}$$

Valuation also plays a key role in corporate finance. As the objective of a company is generally to maximize its value then all decision and strategy has to be aligned. Increasing company value has become management strategy to enlighten the company's shareholder. In this case, financial decision which includes optimal capital structure has to aim to maximize the company value. Company valuation is also necessary to see if the value of the company is being overvalued or undervalued. This information can be useful for when the company is going to issue new shares. Based on market timing theory, company tends to issue shares when the shares of the company is being overvalued, which is when the shares is priced higher by the market. This theory also stated that company prefer to issue shares when cost of capital is low and issue debt if otherwise

Methodology

In this research, data used by the author is secondary data which are financial report of the companies taken from its official website, the financial report are listed below:

1. Audited financial report of PT. Matahari Department Store Tbk from 2010 - 2014
2. Audited financial report of PT. Mitra Adi Perkasa Tbk 2014
3. Audited financial report of PT. Golden Retailindo Tbk 2014
4. Audited financial report of Takashimaya Company Ltd 2014.
5. Audited financial report of J. Front Retailing Co 2014.
6. Audited financial report of Lotte Shopping 2014.

Other than that the author will also used stock data such as share price of PT. Matahari Department Store Tbk. The author will get the data from the official website of PT. Matahari Department Store Tbk and Indonesia Stock Exchange. In conducting this research, the author will process the data using mathematical models and appropriate method. First, the author will analyze the financial performance of PT. Matahari Department Store Tbk using financial ratios. After that the company will determine the optimal capital structure using WACC method.

Below is the step to asses financial performance:

1. Step 1 : Measure financial performance from 2010 - 2014
2. Step 2 : Measure competitors financial performance in 2014
3. Step 3 : Compare the financial performance with competitor
4. Step 4 : Use BUMN Framework for Local Competitor
5. Step 5 : Find score for the company and national competitor.
6. Step 6 : Find sector retail average for Asia region as benchmark.
7. Step 7 : Compare company and competitor with sector retail average as benchmark

Below is the step to determine optimal capital structure using WACC method:

1. Step 1 : Calculate After Tax Cost Debt (rd)
2. Step 2 : Calculate Cost of Equity (using CAPM)
    1. Find risk free rate of the country.
    2. Find the country market risk premium (Damodaran Spread).
    3. Find company's beta.
    4. Calculate using CAPM equation.
3. Step 3: Calculate the weight of debt.
4. Step 4: Calculate the weight of equity.
5. Step 5: Calculate using WACC equation.
6. Step 6: Find lowest cost of capital.
7. Step 7: Find highest firm value by dividing net income with cost of capital.

Result and Discussion

Financial performance that is assessed in this financial performance analysis is liquidity ratios, activity ratios, leverage ratios, and profitability ratios. The financial performance analysis conducted is from 2010 – 2014. In this time series analysis, the financial performance will be compared over the years to see the changes.

Table 2 Time Series Analysis

TIME SERIES ANALYSIS						
Ratios	2010	2011	2012	2013	2014	Average
Liquidity Ratio						
Current Ratio	1.05	0.92	0.80	0.90	0.84	0.90
Quick Ratio	0.77	0.65	0.56	0.52	0.46	0.59
Activity Ratio						
Inventory Turnover	2.93	3.45	3.68	3.30	3.01	3.27
Average Collection Period	5.88	9.29	8.46	5.68	8.15	7.49
Total Asset Turnover	0.85	1.07	1.08	1.38	1.44	1.16
Debt Analysis						
Debt Ratio	2.41	2.12	1.66	1.27	0.95	1.68
Times Interest Earned Ratio	1.29	2.72	2.99	4.08	4.29	3.07
Debt to Equity Ratio	(1.71)	(1.90)	(2.52)	(4.76)	18.19	1.46
Profitability Ratio						
Gross Profit Margin	1.13	1.20	1.17	1.08	1.03	1.12
Operating Profit Margin	0.36	0.48	0.50	0.45	0.43	0.44
Net Profit Margin	(1.84)	0.18	0.24	0.28	0.29	(0.17)
EPS	21.00	160.00	264.00	394.00	486.00	265.00
ROA	(1.56)	0.19	0.26	0.39	0.42	(0.06)
ROE	1.10	(0.17)	(0.40)	(1.47)	7.99	1.41

The liquidity of PT. Matahari Department Store tend to decline each year although in 2013 the current ratio slightly increased from 0.8 to 0.9, but the following year it decreased again to 0.84. The decrease of liquidity ratio happened because the increase of current asset is not proportional compared to the increase of current liabilities. The result of this ratio is that the company's ability to pay short term debt is declining from year to year. The activity ratios of PT. Matahari Department Store don't have any similar pattern. For inventory turnover of PT. Matahari Department Store is increasing from 2010 to 2012 and then decreasing from 2012 onwards. However the ratio is still in the range of 3. The change of this ratio is affected by the accumulated inventory. For average collection period the ratio goes up and down with the highest point reached in 2011 because of the high account receivables. For total asset turn over from 2010 onwards the ratio shows a constant climbing, which means that the company is efficiently using its asset to generate sales.

For the debt to asset ratio, from 2010 onwards it shows a constant declining. Theoretically, good debt ratio will decrease from year to year showing that the asset being financed by liabilities is decreasing. For times interest earned ratio, from 2010 onwards it shows a constant climbing. This means, the company ability to pay its interest expense is increasing as the EBIT of the company is also increasing. For the total debt to total equity ratio, from 2010 – 2013 it shows a negative number because of the negative equity that the company has. However, even though the D/E negative number keeps increasing, from the table above we can see the total debt is actually decreasing and the equity negative number also keep decreasing, so actually the D/E is getting better from year to year. In 2014 the ratio is positive with the number of 18.19, this means that the proportion of total debt to total equity of the company is 18 : 1.

The profit margin ratios don't have similar pattern. For the gross profit margin ratio, the ratio increase from 2010 to 2011, but from 2011 onwards the gross profit margin is declining. And for operating profit margin the ratio increase from 2010 – 2012 then decline to 2014. GPM and OPM are increasing because the increase of net revenue is higher than the increase of the cost and expense regarding the revenue, on the other hand GPM and OPM are decreasing because the increase of revenue is lower than the increase of cost and expense regarding the revenue.However, the net profit margin shows a constant climb from 2010 – 2014. On 2010 the ratio shows that the NPM is minus, the reason of this negative number is because the company experience loss from restructuring transaction. But the next year onwards the net profit is keep increasing respectively. The increase of the net profit also affects the earning per share, since the company didn't issue any new share, the share outstanding remain the same resulting in the increase of EPS. Besides EPS, the ROA is also affected by the increase of net profit, since the total asset didn't show any meaningful changes, the ROA is increasing over the years

For the return of equity, the result of the ratio doesn't have any similar pattern and from 2011 to 2013 the ROE is negative. This negative number happened because the equity is negative from 2010 until 2013. On 2010 the ROE is positive because both equity and net income is negative resulting in a positive ROE. However, even though the ROE negative number keeps increasing, from the table above we can see the net income is increasing and the equity negative number keep decreasing, so actually the ROE is getting better from year to year. And from the table above, we can see that in 2014 the ROE is already positive with a high number of 799%. For cross sectional analysis compares the financial performance of PT. Matahari Department Store with other company in same sector which arePT. Mitra Adi Perkasa Tbk (MAPI), PT. Golden Retailindo Tbk (GOLD), and PT. Ramayana Lestari Sentosa Tbk (RALS), Takashimaya Company Ltd (TKS), J. Front Co (JFROF), and Lotte Shopping Ltd (LTSHY).The author also uses the industry average for Retail Industry, sub sector department store taken from www.csimarket.com. The industry average is used as the benchmark for the cross sectional analysis.

Table 3 Cross Sectional Analysis

2014	IA	LPPF	MAP	GOLD	RALS	TKS	JFROF	LTSHY
Liquidity Ratio								
Current Ratio	0.9	0.84	1.34	9.04	2.79	0.86	0.63	2.51
Quick Ratio	0.15	0.46	0.51	8.92	1.95	0.73	0.53	2.19
Activity Ratio								
Inventory Turnover	3.2	3.01	1.98	8.01	4.72	20.08	29.03	6.12
Average Collection Period	n/a	8.15	16.96	8.48	1.66	51.61	23.99	11.86
Total Asset Turnover	2.13	1.44	1.23	0.48	1.13	0.87	1.13	0.70
Leverage Ratio								
Debt Ratio	1.7	0.95	0.70	0.15	0.26	0.58	0.58	0.56
Times Interest Earned Ratio	n/a	4.29	0.66	0.98	9.03	2.50	2.65	2.57
Debt to Equity Ratio	2.10	18.19	2.33	0.18	0.36	1.40	1.37	1.28
Profitability Ratio								
Gross Profit Margin	0.27	1.03	0.51	1.22	0.40	0.25	0.21	0.31
Operating Profit Margin	0.06	0.43	0.02	0.05	0.06	0.04	0.04	0.04
Net Profit Margin	0.03	0.29	0.01	0.08	0.07	0.03	0.02	0.02
EPS	n/a	486	47.21	10.58	50.04	2,808	7,538	193,162
ROA	0.06	0.42	0.01	0.03	0.08	0.02	0.02	0.02
ROE	0.17	7.99	0.03	0.04	0.11	0.06	0.05	0.04

Better than industry average and other companies
Better than other companies

As we can see from the table above PT. Matahari Department Store Tbk has better ratios than industry average and other companies in the profitability ratio. For the current ratio it's still underperformed compared to the other companies and industry average. For activity ratio, it's still underperformed compared to other companies and industry average for inventory turnover and average collection period. However for the total asset turnover, it's better than other companies but still lower than industry average. For leverage ratio, the company still underperformed compared to other companies and industry average. This analysis gives a clear picture of which aspect of the company that's need to be improved and which aspect that's already ideal. The cost of capital for PT. Matahari Department Store Tbk is calculated by multiplying the cost of equity with its weight and the after tax cost of debt with its weight. The calculation of the cost of capital for PT. Matahari Department Store Tbk is shown in table below.

Table 4 WACC Calculation

Debt	Equity	D/E	Re	Rd(1-t)	WACC
0%	100%	0.00%	11.25%	0.00%	11.25%
10%	90%	11.11%	11.56%	5.93%	11.00%
20%	80%	25.00%	11.95%	5.93%	10.75%
30%	70%	42.86%	12.45%	5.93%	10.49%
40%	60%	66.67%	13.12%	5.93%	10.24%
50%	50%	100.00%	14.06%	5.93%	9.99%
60%	40%	150.00%	15.10%	5.93%	9.60%
70%	30%	233.33%	16.52%	5.93%	9.10%
80%	20%	400.00%	22.46%	5.93%	9.23%
90%	10%	900.00%	49.22%	5.93%	10.25%
100%	0%	-	-	5.93%	-

From the table above we can see that the lowest weighted cost of capital for PT. Matahari Department Store Tbk is in 68% of debt proportion. This mean the optimal capital structure of the company will consists of 68% debt and 32% equity. At current capital structure, PT. Matahari Department Store Tbk consist of 80% debt and 20% equity, but the optimal capital structure based on the WACC is in 68% debt and 32% of equity. The author estimates the firm value by dividing the net income for each debt proportion with its cost of capital. The calculation of firm value is shown on table below.

Table 5 Firm Value Calculation

DEBT	WACC	EBIT	Interest	EBT	Taxes	Net Income	FV
0%	11.25%	2,083,912	0	2,083,912	520,978	1,562,934	13,894,937
10%	11.00%	2,083,912	7,050	2,076,862	519,216	1,557,647	14,164,261
20%	10.75%	2,083,912	14,099	2,069,813	517,453	1,552,360	14,446,177
30%	10.49%	2,083,912	21,149	2,062,763	515,691	1,547,072	14,741,590

40%	10.24%	2,083,912	28,198	2,055,714	513,928	1,541,785	15,051,492
50%	9.99%	2,083,912	35,248	2,048,664	512,166	1,536,498	15,376,976
60%	9.60%	2,083,912	42,298	2,041,614	510,404	1,531,211	15,956,203
70%	9.10%	2,083,912	49,347	2,034,565	508,641	1,525,924	16,762,553
80%	9.23%	2,083,912	56,397	2,027,515	506,879	1,520,636	16,471,538
90%	10.25%	2,083,912	63,446	2,020,466	505,116	1,515,349	14,777,585
100%	-	2,083,912	70,496	2,013,416	503,354	1,510,062	-

As we can see from the table above, if using current capital structure the company value is IDR. 16,471,538,000,000. But if the company uses the optimal capital structure, the firm value is IDR 16,845,583,000,000 which is higher than the current value. The lowest WACC means the highest value of the company.

Conclusion

The current capital structure of PT. Matahari Department Store Tbk consists of 80% debt and 20% equity and has firm value of IDR. 16,471,538,000,000. After conducting data analysis, the author concludes that the optimal capital structure for PT. Matahari Department Store Tbk is in 68% of debt level. By using this debt level the company will have the lowest cost of capital, which is 9.06% and result in highest firm value of IDR 16,845,584,000,000,-. The author also concludes that for financial performances, there are some aspects that already ideal and some are not yet ideal. For liquidity ratio, overall the ratio tends to decline over the year and still underperformed compared to other company even though it's already better than industry average. For activity ratio, some ratio like total asset turnover shows an increasing trend but the other ratios show a declining trend. This ratio is still underperformed compared to industry average. For profitability ratio, overall the company shows an increasing trend because of the constant climb of the net income. This ratio is already better than industry average and other companies. For leverage ratio, overall the company shows a decreasing trend which is good, however this ratio is still underperformed compared to industry average and other companies.

PT. Matahari Department Store Tbk should decrease its leverage and increase its equity to its optimal point in order to have maximum value. At current capital structure, the company has 80% debt and 20% equity, after the analysis that the author did the company should decrease its debt to 68% and increase its equity to 32%. To increase the equity the company can issue new stock as the market is currently valuing the company's stock higher or we can say that the stock is overvalued. According to market timing theory, this is a great time to issue new stock since the market value the stock higher than its actual value. The management can get the proceeds from the new share issuance and then use it as debt repayment. Other option is to use retained earnings of the company to repay the debt.

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